c.) Amendments to the Claims

Status Identifiers of the Claims

- 1. (Cancelled)
- 2. (Cancelled)
- 3. (Cancelled)
- 4. (Cancelled)
- 5. (Cancelled)
- 6. (Withdrawn-currently amended)
- 7. (Withdrawn-currently amended)
- 8. (Withdrawn)
- 9. (Withdrawn)
- 10. (Withdrawn-currently amended)
- 11. (Withdrawn)
- 12. (Withdrawn)
- 13. (Withdrawn)
- 14. (Withdrawn)
- 15. (Withdrawn)
- 16. (New)
- 17. (New)
- 18. (New)
- 19. (New)
- 20. (New)

Listing of Claims

Claims 1-5 (cancelled)

Claim 6 (withdrawn-currently amended): A method of preparing a de novo synthesized plasmid combined from at least two DNA fragments comprising:

(a) preparing a linear replication origin DNA fragment;

- (b) preparing a linear selection marker gene DNA fragment;
- (c) combining the DNA fragments prepared from steps (a) and (b) to form a circular de novo synthesized plasmid without referring entire structure of an existing plasmid;
- (d) introducing the plasmid made from step (c) into a host cell; and
- (e) selecting the plasmid with appropriate replication origin and selection marker from transformed host cells.

Claim 7 (withdrawn-currently amended): The method according to claim 6, wherein any DNA fragment alone used for combining the de novo synthesized plasmid cannot confer both autonomous DNA replication and selection to a plasmid.

Claim 8-9 (withdrawn)

Claim 10 (withdrawn-currently amended): A method of using a de novo synthesized plasmid comprising:

- (a) Linearizing the de novo synthesized plasmid;
- (b) inserting one or more functional DNA fragments to the linearized plasmid to make other plasmids;
- (c) introducing the plasmids made from step (b) into host cells;
- (d) selecting the plasmids and host cells with desired properties; and
- (e) using the plasmids and host cells for biomedical applications.

Claim 11-15 (withdrawn)

Claim 16 (New): A synthesized plasmid comprising at least a replication origin and a selection marker gene wherein;

- (a) the said plasmid is synthesized only with sequences of known functions;
- (b) the said plasmid is synthesized only with sequences of desirable functions;
- (c) the said plasmid is synthesized without using a whole existing plasmid as starting material; and
- (d) the said plasmid is synthesized without referring the entire structure of an existing plasmid.

Claim 17 (new): An isolated DNA fragment comprising the plasmid according to claim 16.

Claim 18 (new): A vector comprising the plasmid according to claim 16.

Claim 19 (new): A bacterial cell strain comprising the vector according to claim 18.

Claim 20 (new): A eukaryotic cell line comprising the vector according to claim 18.